

REMARKS/ARGUMENTS

The Office Action mailed October 4, 2004 and the references cited by the Examiner have been carefully reviewed by Applicants. Claim 1-15 were previously pending in this case. Applicants have amended independent claim 1 and added new claim 16 which depends from claim 1. Applicants have also added new independent claim 17 and dependent claims 18-20 which depend from claim 17. Applicants submit that the amendment to the claims and newly added claims are proper. Applicants respectfully request that the Examiner enter the amendments. Applicants submit that the amended and newly added claims, for the reasons discussed below, place this case in condition for allowance and Applicants earnestly seek such allowance.

Rejection of Claims

The Examiner will recall that the present application relates generally to a system and method for a user of a client application operating in a single-threaded architecture to request and receive multiple messages asynchronously from a destination application. The Examiner rejected Applicants' claims 1-13 and 15 as being anticipated by Desnoyers (U.S. Patent No. 6,098,104). The Examiner rejected claim 14 for obviousness further in view of Chang (U.S. Patent No. 6,338,078) and Burns (U.S. Patent No. 6,098,090).

Response to Rejection

In response to the Examiner's rejection, Applicants have amended claim 1, and added new claims 16-20. Claim 1 has amended claim 1 to clarify that the present invention, as claimed, is substantially different than the Desnoyers reference cited by the Examiner. The present system,

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as claimed, addresses the problem of a user of a client application operating in a single-threaded architecture to request information, which may come from different locations or in different subsets of information, and to receive multiple messages asynchronously from a destination application. The system employs a software agent to manage the requests so that the client application can continue processing. Were it not for the software agent, the single-threaded architecture would cause the client application to wait on a reply and process synchronously.

To clarify the differences between the Applicants' invention, claim 1 has been amended to include the user requesting information for processing via the client application, the information including a first and second, sets of information, the client application sending a first request for the first set of information to a software agent, the client application and the software agent operating in a single-threaded architecture. The amendment further include that the second request is for the second set of information, that the client application processing other sets of information and continuing on in execution in its single-threaded environment prior to receiving responses to the first request or the second request from the software agent, the first, second, and other sets of information containing related information. Applicants respectfully submit that the cited references, either alone or in combination, fail to teach, disclose, or suggest Applicants' invention as claimed in amended claim 1. For these reasons, Applicants respectfully request the Examiner to withdraw the rejection and pass claims 1-15 to issue.

Applicants have added new claim 16, which depends from claim 1 and include that the information may be customer information and that the first, second, and other sets of information contain a portions of information related to a specific customer.

Desnoyers on the other hand is directed to a completely different problem. The

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Desnoyers disclosure is directed to eliminating the inefficiencies and overhead caused by a destination application which continually polls queues for its messages. Desnoyers teaches, as the solution, a notification technique whereby an interrupt is generated at a destination node providing notification of arrival of a message at the destination node. Desnoyers teaches that the interrupt may be initiated by the source or destination node setting an interrupt field in the message.

Desnoyers does not discuss the specific architecture in which the disclosed system operates, and fails to teach, disclose, or suggest a single-threaded architecture as claimed by Applicants. Examiner cited col. 1 lines 19-22 and col. 2 lines 6-10, but these lines only disclose that the Desnoyers source and destination applications operate asynchronously. The cited language fails to teach, disclose, or suggest the claimed client application or that the client application is operating in a single-threaded environment (and therefore not operable for multi-threaded asynchronous processing without the enablement of the software agent and accompanying functionality). The Examiner also cites col. 4 lines 52-56 which discloses a "destination node hardware, higher level application software, and/or communication software system (CSS)." (Desnoyer col. 3, lines 41-43) The cited reference fails to teach a client application and software agent operating in a single-threaded architecture, the client application processing other sets of information and continuing on in execution in its single-threaded environment prior to receiving responses to the first request or the second request from the software agent as claimed.

Further regarding the software agent, the Examiner generally points to col. 4 lines 52-65 as disclosing Applicants' claimed software agent and the software agent functionality with the

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client application. Applicants respectfully submit that the cited lines disclose either or both a "lower level communication system (CSS)" (col. 3, lines 32) or "higher level application software and/or communication system software (CSS)" (col. 3, lines 42-43) that promotes maintaining only information for locating (SMD) a message, the location information maintained on a source node. The cited lines further disclose that this location (SMD) is updated as the message location changes, such as being sent to the destination node. The cited portions or other references fail to teach, disclose, or suggest Applicants' software agent, or sending requests from a client application to a software agent as claimed.

Although the Desnoyers disclosure includes some terminology similar to that of Applicants' claims, the disclosed function and the components employing that function are significantly different making any termed similarity insufficient for rejection of Applicants' claims. For example, the Examiner rejected Applicants' claim of the software agent cyclically polling the destination application for a first and second response and cites Desnoyer col. 8 line 65- col. 9 line 15. The Examiner cites the same lines in rejecting the claimed client application polling the software agent functionality. The text cited by the Examiner suggests polling for messages by the destination application, not the software agent or client application as claimed in Applicants' claim 1 and new claim 17. Since the cited references, either alone or in combination, fail to teach, disclose, or suggest Applicants' invention, Applicants respectfully request the Examiner to withdraw the rejection and pass claims 1 and 17 and the dependent claims to issue.

Applicants new claim 17 is similar to claim 1 prior to this amendment and includes elements from claim 12 that the client application may register a call back with the software agent. The software agent ceases cyclically polling after receiving a response from the

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destination application, and the software agent notifies the user that the first response has been received in response to the call back. In rejecting claim 12, the Examiner pointed to generic polling language such as col. 9 line 50 – col. 10 line 5. Applicants respectfully submit that general language such as "the flexibility of using standard polling approaches, and/or selective source or destination initiated interrupts to notify applications" (col. 10, lines 6-9) fails to teach a software agent polling a destination application and then notifying a user of the received response in response to the client application registering the callback. Applicants' new dependent claims 18-20 depend from new independent claim 17 and contain subject matter similar to claims 13-15. Applicants respectfully submit that the cited references, either alone or in combination, fail to teach, disclose, or suggest Applicants' invention as claimed in new claims 17-20. For this reason, Applicants respectfully request allowance of claims 17-20.

Conclusion

Applicants respectfully submit that the application in its present form is in condition for allowance. If the Examiner has any questions or comments or otherwise feels it would be helpful in expediting the application, Examiner is encouraged to telephone the undersigned at (972) 731-2288. Applicants intend this communication to be a complete response to the Office Action mailed on October 4, 2004.

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The Commissioner is hereby authorized to charge payment of any further fees associated with any of the foregoing papers submitted herewith, or to credit any overpayment thereof, to Deposit Account No. 21-0765, Sprint.

Respectfully submitted,



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